

AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0049] as follows:

[0049] (I) One embodiment of such a device is shown in FIG. 8A and FIG. 8B in which a radiation source 10 constructed with electrical coil resistance or other heating elements 11 embedded in and surrounded by electricity insulation and thermal conductive materials 25 (including, but without limitation, electro fused magnesium oxide) in tubular casing 16 as shown in FIG. 4B (comprises one or more materials or matters selected from a group consisting of stainless steel, low carbon steel, aluminum, aluminum alloys, aluminum-iron alloys, chromium, molybdenum, manganese, nickel, niobium, silicon, titanium, zirconium, rare-earth minerals or elements (including, without limitation, cerium, lanthanum, neodymium and yttrium), and ceramics, nickel-iron alloys, nickel-iron-chromium alloys, nickel-chromium alloys, nickel-chromium-aluminum alloys, and other alloys alike and oxides, sesquioxides, carbides and nitrides whereof, or a mixture alloys or oxides, sesquioxides, carbides, hydrates or nitrates whereof, certain carbonaceous materials and other infrared radiating materials) is placed before a generally circular hat-shaped or ring-shaped reflective element 23 constructed of good reflective materials, including, but without limitation, gold (emissivity=0.02), polished aluminum (emissivity=0.05), oxidized aluminum (emissivity=0.15), in the form as shown in FIG. 8A, the end(s) or terminal(s) of the radiation source 10 being turned towards and passing through aperture(s) on the concave reflective surface 20 and stowed and secured at appropriate location(s) within the recess(es) behind the concave reflective surface 20 (with desirable and appropriate safety features known by those skilled in the art), so that a point on the radiation source 10 facing the generally circular hat-shaped or ring-shaped reflective element 23 is positioned at or near the center point or focal zone of the corresponding segment of the concave reflective surface 20 of the generally circular hat-shaped or ring-shaped reflective element 23 and the infrared radiation emitted from such point on the radiation source is directed or reflected away from the concave reflective surface 20 substantially in the manner as shown in FIG. 8C. The radial cross-section of the tubular casing 16 as shown in FIG. 4B may take generally circular, triangular, rectangular, polygonal or elliptical shapes, or hybrids and/or combinations

whereof in light of the shape of the generally circular hat-shaped or ring-shaped reflective element with a view to maximizing the effect of the irradiation for the selected purposes. The concave reflective surface 20 of the generally circular hat-shaped or ring-shaped reflective element 23 may be conic (being spherical, paraboloidal, ellipsoidal, hyperboloidal) or other surfaces that can be generated from revolution, or in other manner, of quadratic or other equations. The radiation emitted from the generally circular hat-shaped or ring-shaped reflective element 23 is concentrated mainly within the irradiated zone 21 as shown in FIG. 8A and FIG. 8B for the purposes of heating or irradiating bodies, objects, substances or matters (including, but without limitation, food and other materials) placed or found within the irradiated zone 21, with a view to saving or maximizing the efficient use of energy emitted from the radiation source and whilst reducing or minimizing the effect of radiation on other bodies, objects, substances or matter (including, but without limitation, food and other materials) not within the irradiated zone 21 as shown in FIG. 8A and FIG. 8B.